AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A method of analyzing a quantity indicative of blood perfusion through a myocardium by analyzing a varying quantity which furnishes an easy reference rendition of the variations of the quantity, the quantity having temporal and spatial variations, including:

obtaining a multidimensional output data array, the multidimensional output data array comprising array positions arranged along at least a first data-axis and a second data-axis; and

receiving with a processor values corresponding to [[a]] the quantity indicative of blood perfusion through tissue based on time series perfusion images generated from image data acquired by a tomographic imaging system;

wherein first values corresponding to the quantity at substantially a same instant in time are mapped by the processor to respective positions in the multidimensional output data array at equal positions along the first data-axis, and second values corresponding to the quantity at substantially a same spatial position are mapped by the processor to respective positions in the multidimensional output data array at equal positions along the second data-axis.

2. (Previously presented) The method as claimed in Claim 1, further including:

acquiring the first and second values of the quantity for respective temporal instants and for respective spatial sections; and

mapping the second values of the quantity for individual spatial sections to respective positions in the multidimensional output data array at equal positions along the second data-axis.

3. (Previously presented) The method as claimed in Claim 1, further including acquiring the first and second values of the quantity for respective time intervals and for respective spatial positions and mapping the first values of the quantity for individual time

intervals to respective positions in the multidimensional output data array at equal positions along the first data-axis.

4. (Previously presented) The method as claimed in Claim 1, further including mapping the first values of the quantity for successive time intervals to adjacent positions in the multidimensional output data array; and mapping the second values of the quantity for adjacent spatial sections to adjacent positions in the multidimensional output data array.

5. (Previously presented) The method as claimed in Claim 4, further including mapping the second values of the quantity for radially contiguous spatial sections to contiguous positions in the multidimensional output data array.

6. (Previously presented) The method as claimed in Claim 1, wherein the first and second values of the quantity are derived from the time series perfusion images.

7. (Previously presented) The method as claimed in Claim 1, wherein the first values of the quantity at respective instants of time are derived from respective images in said time series perfusion images.

8. (Previously presented) The method as claimed in Claim 7, further including linking respective positions in the multidimensional output data array to respective spatial sections in respective images of the time series perfusion images.

9. (Previously presented) The method as claimed in Claim 8, further including:
displaying the multidimensional output data array;
indicating a position in the displayed multidimensional output data array; and
displaying the respective image of the time series perfusion images on the basis of the respective indicated position in the displayed multidimensional output data array and marking the respective spatial section in the image.

10. (Previously presented) The method as claimed in Claim 1, wherein the quantity pertains to perfusion of the myocardium.

11. (Currently amended) A data processing system adapted to analyze a quantity indicative of blood perfusion through a myocardium by analyzing a varying quantity which furnishes an easy reference rendition of the variations of the quantity, the quantity having temporal and spatial variations, the system comprising:

a processor that obtains a multidimensional output data array, the multidimensional output data array comprising array positions arranged along at least a first data-axis and a second data-axis and that receives values corresponding to [[a]] the quantity indicative of blood perfusion through tissue based on time series perfusion images generated from image data acquired by a tomographic imaging system;

wherein first values corresponding to the quantity at substantially a same instant in time are mapped by the processor to respective positions in the multidimensional output data array at equal positions along the first data-axis, and second values corresponding to the quantity at substantially a same spatial position are mapped by the processor to respective positions in the multidimensional output data array at equal positions along the second data-axis.

12. (Currently amended) A computer-readable medium having stored therein computer executable instructions that when executed on a computer perform a method of analyzing a quantity indicative of blood perfusion through a myocardium by analyzing a varying quantity which furnishes an easy reference rendition of the variations of the quantity, the quantity having temporal and spatial variations, including causing ~~cause~~ the computer to:

obtain a multidimensional output data array, the multidimensional output data array comprising array positions arranged along at least a first data-axis and a second data-axis;

receive values corresponding to [[a]] the quantity indicative of blood perfusion through tissue based on time series perfusion images generated from image data acquired by a tomographic imaging system;

wherein first values corresponding to the quantity at substantially a same instant in time are mapped to respective positions in the multidimensional output data array at equal positions

along the first data-axis, and second values corresponding to the quantity at substantially a same spatial position are mapped to respective positions in the multidimensional output data array at equal positions along the second data-axis.

13. (Previously Presented) The method of claim 1, further comprising displaying the multidimensional output data array.

14. (Previously presented) The method of claim 13, wherein the values of the quantity are derived from the image data, and further comprising displaying the image data while displaying the multidimensional output data array.

15. (Previously presented) The method of claim 1, wherein the quantity is an average brightness value of the image data.

16. (Previously presented) The method of claim 15, wherein the image data comprises perfusion data of a human myocardium.

17. (Previously presented) The system of claim 11, further comprising a display device adapted to display the multidimensional output data array.

18. (Previously presented) The system of claim 17, wherein the values of the quantity are derived from the image data, and wherein the display device is further adapted to display the image data while displaying the multidimensional output data array.

19. (Previously presented) The system of claim 11, wherein the quantity is an average brightness value of the image data.

20. (Previously presented) The system of claim 19, wherein the image data comprises perfusion data of a human myocardium.